

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ian C. Mcleod on 11/18/09.

The application has been amended as follows:

In the claims:

7. (Currently Amended) A reactor system for deposition of diamond films from a gaseous phase in a plasma of a microwave discharge, which system contains a microwave generator, a transmission line ending with a quasi-optical electrodynamic system, a reaction chamber with a substrate on a substrate holder placed in the chamber, and a system for pump-in and pump-out of the selected gaseous mixture,

the improvement which comprises a quasi-optical electrodynamic system with four concave mirrors focused together towards the plasma and adapted to form a standing microwave in an area ~~selected in a vicinity~~ near the surface of the substrate, and the transmission line is a circular waveguide with corrugation of its internal surface, which is supplemented with a plane mirror system [to] that transfers therefrom at least four Gaussian beams to the concave mirrors of the said quasi-optical electrodynamic system, so that the four beams are focused towards the plasma.

Allowable Subject Matter

Claims 7, 8 and 14 allowed.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

Claim 7 - Closest prior arts [Wort et al (EP 0 520 832), Mori (US 5,310,426)] do not teach claim limitation "a quasi-optical electrodynamic system with four concave mirrors focused together towards the plasma and adapted to form a standing microwave in an area near the surface of the substrate, and the transmission line is a circular waveguide with corrugation of its internal surface, which is supplemented with a plane mirror system that transfers therefrom at least four Gaussian beams to the concave mirrors of the said quasi-optical electrodynamic system, so that the four beams are focused towards the plasma" in the context of remaining limitations of the claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAKESH DHINGRA whose telephone number is (571)272-5959. The examiner can normally be reached on 8:30 - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571-272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. D./
Examiner, Art Unit 1792

/Parviz Hassanzadeh/
Supervisory Patent Examiner, Art Unit 1792